APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/659,779	09/11/2000	TOSHIHARU OGURO	PF-2667/NEC/US/mh	5144

466   7590   04/28/2003

YOUNG & THOMPSON
745 SOUTH 23RD STREET 2ND FLOOR
ARLINGTON, VA 22202

EXAMINER
HUYNH, KIM T

ART UNIT	PAPER NUMBER
2189	7

DATE MAILED: 04/28/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>25 February 2003</u> .

2a) ☒ This action is **FINAL.**   2b) ☐ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-8</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-8</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.

    If approved, corrected drawings are required in reply to this Office action.

12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All b) ☐ Some * c) ☐ None of:

        1. ☐ Certified copies of the priority documents have been received.

        2. ☐ Certified copies of the priority documents have been received in Application No. _____ .

        3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

    a) ☐ The translation of the foreign language provisional application has been received.

15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ .

4) ☐ Interview Summary (PTO-413) Paper No(s). _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in a patent granted on an application for patent
> by another filed in the United States before the invention thereof by the applicant
> for patent, or on an international application by another who has fulfilled the
> requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before
> the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act

of 1999 (AIPA) do not apply to the examination of this application as the application

being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily

published under 35 U.S.C. 122(b). Therefore, this application is examined under 35

U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2.   Claims 1-8 are rejected under 35 U.S.C. 102(e) as being anticipated by Brief et

al. (U.S Patent 6,205,501)

a. As per claim 1, Brief discloses A universal serial bus function evaluator

connected between a computer and an universal serial bus function, said universal

serial bus function evaluator comprising:

- o   a token storage memory for storing a token transmitted from said

    computer; (col.4, lines 36-42)

- o   a packet type judging circuit for judging a type of a return data packet

    returned from said universal serial bus function; (col.16, lines 42-57)

o   a functional circuit connected to said token storage memory for

fetching IN token from said token storage memory and holding the same,

and said functional circuit also being connected to said packet type

judging circuit for receiving an information about the type of said return

data packet from said packet type judging circuit, so that if said return data

packet is of NAK type, then said functional circuit automatically transmits

the 1N token held therein to said universal serial bus function, repeatedly

until said return data packet is of either DATA type or STALL type, then

said functional circuit cancels the held IN token. (col.5, lines 45-64), (col.8,

lines 21-25), (col.7, lines 22-55), (col.5, lines 9-11, 55-64), wherein

controller control transfer and automatically responds)

b. As per claim 2, Brief discloses:

o   an oscillator for generating a clock signal ; (col.7, lines 22-35), (col.8,

lines 1-6)

o   an IN token holding circuit connected to said oscillator for receiving

said clock signal and also connected to said token storage memory for

fetching IN token from said token storage memory and holding the

same; (col.5, lines 45-64), (col.7, lines 22-67), (col.8, lines 1-25)

o   a timing controller connected to said oscillator for receiving said clock

signal and also connected to said packet type judging circuit for

receiving an information about the type of said return data packet, and

said timing controller also connected to said IN token holding circuit for

controlling said IN token holding circuit both in a holding timing for

holding said IN token and in a transmitting timing for transmitting said

IN token to said universal serial bus function. (col.7, lines 22-55),

(col.2, lines 6-11)

c. As per claim 3, Brief discloses an EOP detecting circuit connected to said

universal serial bus function for receiving said return packet to detect a packet

end of said return packet, and said EOP detecting circuit also connected to said

timing controller for sending an EPO detecting signal which represents the

packet end to said timing controller. (col.7, lines 22-35)

d. As per claim 4, Brief discloses return data packet is of DATA type, then said

functional circuit not only cancels the held IN token but also transmits ACK token.

(col.7, lines 28-55)

e. As per claim 5, Brief discloses:

- o   an oscillator for generating a clock signal ; (col.7, lines 22-35), (col.8, lines

  1-6)

- o   an IN token holding circuit connected to said oscillator for receiving said

  clock signal and also connected to said token storage memory for fetching

  IN token from said token storage memory and holding the same; (col.5,

  lines 45-69), (col.7, lines 22-67), (col.8, lines 1-25)

- o   an ACK token transmission circuit connected to said oscillator for

  receiving said clock signal; (col.7, lines 22-35)

- a timing controller connected to said oscillator for receiving said clock signal and also connected to said packet type judging circuit for receiving an information about the type of said return data packet, and said timing controller also connected to said IN token holding circuit for controlling said IN token holding circuit both in a holding timing for holding said IN token and in a transmitting timing for transmitting said IN token to said universal serial bus function, so that if said return data packet is of DATA type, then said timing controller allows said ACK token transmission circuit to transmit an ACK token to said universal serial bus function. (col.7, lines 22-55), (col.2, lines 6-11)

f. As per claim 6, Brief discloses:

- token storage memory for storing a token transmitted from said computer ; (col.4, lines 36-42)

- a token transmission circuit connected to said token storage memory for transmitting a token stored in said token storage memory ; (col.7, lines 36-42)

- an IN token detecting circuit connected to said token transmission circuit ; (col.7, lines 22-35)

- an oscillator for generating a clock signal ; (col.7, lines 22-35), (col.8, lines 1-6)

- an IN token holding circuit connected to said oscillator for receiving said clock signal and also connected to said token transmission circuit for

receiving an IN token from said token transmission circuit and holding the

same ; (col.7, lines 22-67), (col.5, lines 45-64), (col.8, lines 1-25)

a receiving shift register being connected to a universal serial bus function

for receiving a return packet from said universal serial bus function ; (col.8,

lines 22-46)

o   a packet type judging circuit connected to said receiving shift register for

receiving said return packet and judging a type of said return packet;

(col.16, lines 42-57)

o   an EOP detecting circuit connected to said universal serial bus

function for receiving said return packet to detect a packet end of said

return packet ; (col.7, lines 22-35)

a timing controller connected to said oscillator for receiving said clock

signal and also connected to said EOP detecting circuit for receiving an

EOP detecting signal which represents said packet end of said return

packet, said timing controller also connected to said packet type judging

circuit for receiving an information about the type of said return packet,

and said timing controller also connected to said IN token holding circuit

for controlling said IN token holding circuit both in a holding timing for

holding said IN token and in a transmitting timing for transmitting said IN

token to said universal serial bus function, so that if said return packet is of

NAK type and said timing controller receives both said return packet of

NAK type and said EOP detecting signal, then said timing controller allows

said IN token holding circuit to transmit the 1N token held therein to said

universal serial bus function repeatedly until said return data packet is of

either DATA type or STALL type, then said timing controller instructs said

IN token holding circuit to hold said IN token therein. (col.2, lines 6-11),

(col.7, lines 22-55), (col.8, lines 21-25), (col.5, lines 45-64) (col.5, lines 9-

11, 55-64), wherein controller control transfer and automatically

responds)

g. As per claim 7, Brief discloses an ACK token transmission circuit connected to

said oscillator for receiving said clock signal, and if said return packet is of DATA

type, then said timing controller allows said ACK token transmission circuit to

transmit an ACK token to said universal serial bus function. (col.7, lines 28-55)

h. As per claim 8, Brief discloses:

- ○ judging a type of a return data packet returned from said universal serial

  bus function ; (col.4, lines 36-42)

- ○ fetching IN token from said storing means and holding the same; (col.5,

  lines 45-64)

  receiving an information about the type of said return data packet from

  said packet type judging circuit, so that if said return data packet is of NAK

  type, then said functional circuit automatically transmits the IN token held

  therein to said universal serial bus function repeatedly until said return

  data packet is of either DATA type or STALL type, then said functional

  circuit cancels the held IN token. (col.8, lines 21-25), (col.7, lines 22-55),

(col.5, lines 45-64) (col.5, lines 9-11, 55-64), wherein controller control

transfer and automatically responds)

Response to Amendment

3.   Applicant's arguments filed 2/25/03 have been fully considered but they not

persuasive.

        a. In response to applicant's argument that with the amended claims Brief does

not disclose or suggest a USB evaluator in which, when a NAK packet is received from

a USB function in response to an IN token, the IN token is held and repeatedly

transmitted automatically until the USB function returns a DATA or STALL packet.

However, Brief does discloses controller control transfer and automatically responds,

controller automatically sends a NAK if pipe does not contain data and controller

automatically sends data if the pipe does contain data. (col.5, lines 9-11, 55-64)

        Applicant's amendment necessitated the new ground(s) of rejection presented in

this Office action. Accordingly, THIS ACTION IS MADE FINAL. See MPEP

§ 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37

CFR 1.136(a).

        A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

4.   *Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kim Huynh whose telephone number is (703)305-5384 or via e-mail addressed to [kim.huynh3@uspto.gov]. The examiner can normally be reached on M-F 8:30AM- 6:30PM.*

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Rinehart can be reached on (703) 305-4815 or via e-mail addressed to [mark.rinehart@uspto.gov]. The fax phone numbers for the organization where this application or proceeding is assigned are (703)746-7249 for regular communications and (703)746-7238 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)306-5631.

Kim Huynh

April 23, 2003

RUPAL DHARIA
PRIMARY EXAMINER